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(54) Title: NON-COVALENT BONDING AGENT FOR CARBON NANOTUBE REINFORCED POLYMER COMPOSITES

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(57) Abstract: A non-covalent bonding agent (425) for carbon nanotube-reinforced polymer composites. The composite includes a polymeric solid state continuous phase and one or more carbon nanotubes (410) dispersed in the continuous phase. The carbon nanotubes (410) are joined to the polymer through the use of a bonding agent (425) that mechanically couples the polymer chains (420) to the carbon nanotubes (410). The bonding agent (425) is non-covalently bonded to the carbon nanotube (410) in a manner that retains substantially all of the properties of the carbon nanotube material and therefore permitting the carbon nanotubes (410) to reinforce the polymer composite. The polymer composites may include a variety of different base polymers and may be used in a variety of applications.

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